IFW image

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Applicant:		§	
	Oron YACOBY-ZEEVI et al	§	
Serial No.:	10/559,925	§	
Filed:	02-May-2006	§	Group Art Unit: 1644
For:	HEPARANASE ACTIVITY NEUTRALIZING ANTI-HEPARANASE MONOCLONAL ANTIBODY AND OTHER ANTI-HEPARANASE ANTIBODIES	§	Attorney Docket: 30337
Examiner:	DIBRINO, MARIANNE NMN	§	

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Enclosed is a PTO Form 1449 which lists citations which may be material to the patentability and examination of the above identified application. Also enclosed are copies of all other references have been received by the Examiner through corresponding applications. These are submitted in compliance with the duty of disclosure defined in 37 CFR 1.56. The Examiner is requested to make these citations of official record in this application.

Applicant requests that MPEP 609 III A(2)(E) be complied with and the examiner consider information which has been considered by the Office in a parent applications thereof. A listing of the references cited in those applications follows on the attached PTO/SB/08A. Applicant respectfully requests that they be made of record in the instant application.

This application is a National Phase Application of PCT Application No. PCT/IL2004/000477 having International Filing Date of June 3, 2004, which claims the benefit of U.S. Patent Application No. 10/456,573, filed on June 9, 2003 and U.S. Patent Application No. 10/645,659, filed on August 22, 2003. The contents of the above Application s are all incorporated herein by reference.

This Information Disclosure Statement under 37 CFR 1.56 is not to be construed as a representation that a search has been made, that additional matter which is material to the examination of this application does not exist, or that any or more of these citations constitutes prior art.

Respectfully submitted,

Martin D. Moynihan
Registration No. 40,338

Dated: January 11, 2007

PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S.Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	1	of	27	Attorney Docket Number	30337

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. [1]	Document Number Number-Kind Code [2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US-5,997,863	07-7-1999	Zimmermann et al.	
	2	US-5,688,679	11-18-1997	Powell	
	3	US-6,387,643	05-14-2002	Heinrikson et al.	
	4	US-6,423,312	07-23-2002	Yacoby-Zeevi	
	5	US-6,531,129	03-11-2003	Pecker et al.	
	6	US-4,455,296	06-19-1984	Hansen et al.	
	7	US-5,571,506	05-5-1996	Regan et al.	
	8	US-5,917,830	06-29-1999	Chen et al.	
	9	US-5,859,660	01-12-1999	Perkins et al.	
	10	US-5,600,366	04-4-1997	Schulman	
	11	US-6,020,931	01-1-2000	Bilbrey et al.	
	12	US-6,153,187	11-28-2000	Yacoby-Zeevi	
	13	US-5,145,679	08-8-1992	Hinson	
	14	US-5,736,137	07-7-1998	Anderson et al.	
	15	US-5,194,596	03-16-1993	Tischer et al.	
	16	US-5,350,836	09-27-1994	Kopchick et al.	
	17	US-6,562,950	05-13-2003	Peretz et al.	
	18	US-6,699,672	02-2-2004	Pecker et al.	
	19	US-5,580.862	03-3-1996	Rosen et al.	
	20	US-5,474,983	12-12-1995	Kuna et al.	
	21	US-2002/0102560	01-1-2002	Pecker et al.	
	22	US-6,790,658	09-14-2004	Pecker et al.	
	23	US-6,798,658	09-28-2004	Takedomi et al.	
	24	US-5,618,709	08-8-1997	Gewirtz et al.	
	25	US-5,656,595	08-12-1997	Schweighoffer et al.	
	26	US-4,683,195	07-28-1987	Mullis et al.	
	27	US-5,602,095	02-11-1997	Pastan et al.	
	28	US-2004/0142427	07-22-2004	Pecker et al.	
	29	US-4,117,841	03-3-1978	Perrotta et al.	
	30	US-2003/0161823	08-28-2003	Ilan et al.	
	31	US-5,962,321	05-5-1999	Gough et al.	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S.Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

	Complete if Known
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 2 of 27

U.S. PATENT DOCUMENTS

	32	US-5,830,759	03-3-1998	Chang et al.	
	33	US-6,230,151	08-8-2001	Agrawal et al.	
	34	US-5,799,311	08-25-1998	Agrawal et al.	
	35	US-6,314,420	06-6-2001	Lang et al.	
	36	US-4,937,747	06-26-1990	Koller	
	37	US-6,307,965	10-23-2001	Aggarwal et al.	
	38	US-6,226,792	01-1-2001	Goiffon et al.	
	39	US-5,859,929	01-12-1999	Zhou et al.	
	40	US-5,799,276	08-25-1998	Komissarchik et al.	
	41	US-2002/0068061	06-6-2002	Peretz et al.	
	42	US-5,360,735	01-1-1994	Weinshank et al.	
	43	US-2002/0088019	04-4-2002	Yacoby-Zeevi	
	44	US-5,589,604	12-31-1996	Drohan et al.	
	45	US-5,700,671	12-23-1997	Prieto et al.	
	46	US-5,714,345	03-3-1998	Clark	
	47	US-5,716,817	02-10-1998	T?rnell	
	48	US-6,140,552	10-31-2000	Deboer et al.	
	49	US-2003/0163836	08-28-2003	Garofalo et al.	
	50	US-2002/0194625	12-19-2002	Zcharia et al.	
	51	US-6,190,875	02-20-2001	Ben-Artzi et al.	
	52	US-2001/0006630	05-5-2001	Yacobi-Zeevi et al.	
	53	US-2002/0114801	08-22-2002	Pecker et al.	
	54	US-6,475,763	05-5-2002	Ayal-Hershkovitz et al.	
	55	US-6,426,209	07-30-2002	Ayal-Hershkovitz et al.	
	56	US-6,800,441	05-5-2004	Pecker et al.	
	57	US-2002/0168749	11-14-2002	Pecker et al.	
	58	US-2003/0068806	04-10-2003	Ayal-Hershkovitz et al.	
	59	US-6,946,131	09-20-2005	Peretz et al.	
	60	US-2003/0181687	09-25-2003	Peretz et al.	
	61	US-6,960,471	01-1-2005	Pecker et al.	
	62	US-2003/0190737	09-9-2003	Pecker et al.	
	63	US-2003/0170860	09-11-2003	Pecker et al.	
	64	US-2003/0217375	11-20-2003	Zcharia et al.	
	65	US-2004/0213789	10-28-2004	Yacobi-Zeevi et al.	
	66	US-2004/0063135	01-1-2004	Pecker et al.	
	67	US-2004/0146497	07-29-2004	Ilan et al.	
	68	US-6,986,996	01-17-2006	Pecker et al.	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S.Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

	Complete if Known
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 3 of 27

U.S. PATENT DOCUMENTS

	69	US-2004/0146925	07-29-2004	Pecker et al.	
	70	US-2005/0260187	11-24-2005	Ilan et al.	
	71	US-2006/0008892	01-12-2006	Yacobi-Zeevi et al.	
	72	US-2003/0031660	02-13-2003	Yacobi-Zeevi et al.	
	73	US-4,859,581	08-22-1989	Nicholson et al.	
	74	US-4,882,318	11-21-1989	Vlodavsky et al.	
	75	US-5,129,877	07-14-1992	Gallo et al.	
	76	US-5,206,223	04-27-1993	Vlodavsky et al	
	77	US-5,332,812	07-26-1994	Nicolson et al.	
	78	US-5,362,641	08-8-1994	Fuks et al.	
	79	US-5,399,351	03-21-1995	Leshchiner et al	
	80	US-5,550,116	08-27-1996	Lormeau et al.	
	81	US-5,667,501	09-16-1997	Fowler et al.	
	82	US-5,739,115	04-14-1998	Fugedi et al	
	83	US-6,348,344	02-19-2002	Ayal-Hershkovitz et al.	
	84	US-4,946,778	08-8-1990	Ladner et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. [1]	Foreign Patent Documents — Country Code[3] Number[4] Kind Code[5] (*if known*)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T [6]
	85	PCT WO 95/04158	09-9-1995	Hoogewerf et al.		
	86	PCT WO 99/21975	06-6-1999	Freeman et al.		
	87	PCT WO 91/19197	12-12-1991	Nicolson et al.		
	88	PCT WO 95/04518	02-16-1995	Midha et al.		
	89	PCT WO 97/11684	03-3-1997	Bennett et al.		
	90	PCT WO 99/18852	04-22-1999	Arenson		
	91	PCT WO 91/02977	07-7-1991	Fuks et al.		
	92	PCT WO 97/27327	07-31-1997	Van Ness et al.		
	93	PCT WO 00/52149	08-8-2000	Yacobi-Zeevi		
	94	PCT WO 00/52178	08-8-2000	Pecker et al.		
	95	PCT WO 99/40207	08-12-1999	Nakajima et al.		
	96	PCT WO 98/46258	10-22-1998	Bhaskar et al.		
	97	EP 0254067	01-27-1988	Cohen et al.		

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S.Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	4	of	27

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

U.S. PATENT DOCUMENTS

	98	PCT WO 98/03638	01-29-1998	Freeman et al.		
	99	PCT WO 88/01280	02-25-1988	Nicolson et al.		
	100	PCT WO 01/00643	04-4-2001	Pecker et al.		
	101	PCT WO 99/48478	09-30-1999	Yacoby-Zeevi		
	102	PCT WO 00/03036	01-20-2000	Ben-Artzi et al.		
	103	PCT WO 00/25817	05-11-2000	Peretz et al.		
	104	PCT WO 92/01003	01-23-1992	Nicolson et al.		
	105	PCT WO 02/32283	04-25-2002	Yacoby-Zeevi		
	106	PCT WO 02/19962	03-14-2002	Ilan et al.		
	107	AU 735116	06-28-2001	Pecker et al.		
	108	AU 768820	08-8-2004	Ben-Artzi et al.		
	109	PCT WO 99/57244	11-11-1999	Ben-Artzi et al.		
	110	PCT WO 99/57153	11-11-1999	Pecker et al.		
	111	PCT WO 99/11798	03-11-1999	Pecker et al.		

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

PTO/SB/08b (08-03)
Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 5 Of 27

Examiner Initials	Cite No.[1]	OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	112	Kurachi et al. "Role of Intron I in Expression of the Human Factor IX Gene", Journal of Biological Chemistry, 270(10): 5276-5281, 1995.	
	113	Carlone et al. "Embryonic Modulation of Basic Fibroblast Growth Factor in the Rat Uterus", Biology of Reproduction, 49(4): 653-665, 1993.	
	114	Wight et al. "The Role of Proteoglycans in Cell Adhesion, Migration and Proliferation", Current Opinion in Cell Biology, 4: 793-801, 1992.	
	115	Rader et al. "A Phage Display Approach for Rapid Antibody Humanization: Designed Combinatorial V Gene Libraries", Proc. Natl. Acad. Sci. USA, 95: 8910-8915, 1998.	
	116	Wordinger et al. "The Immunolocalzation of Basic Fibroblast Growth Factor in the Mouse Uterus During the Initial Stages of Embryo Implantation", Growth Factors, 11(3): 175-186, 1994. Abstract.	
	117	Schultz et al. "Growth Factors in Preimplantation Mammalian Embryos", Oxford Review of Reproduction in Biology, 15: 43-81, 1993. Abstract.	
	118	Yazaki et al. "The Structure and Expression of the FGF Receptor-1 mRNA Isoforms in Rat Tissues", Biochimica et Biophysica Acta, 1172: 37-42, 1993.	
	119	Richardson et al. "Regulation of Basic Fibroblast Growth Factor Binding and Avtivity by Cell Density and Heparan Sufate", J. Biological Chemistry, 274(19): 13534-13540, 1990.	
	120	Hayward et al. "Cellular Mechanisms of Heparinase III Protection in Rat Traumatic Shock", American Journal of Physiology, 275: H23-H30, 1998.	
	121	Sasisekharan et al. "Heparinase Inhibits Neovascularization", Proc. Natl. Acad.Sci. USA, 91: 1524-1528, 1994.	
	122	Whitelock et al. "The Degradation of Human Endothelial Cell-Derived Perlecan and Release of Bound Basic Fibroblast Growth Factor by Stromelysin, Collagenase, Plasmin, and Heparanases", Journal of Biological Chemistry, 271(17): 10079-10086, 1996.	
	123	Ishai-Michaeli et al. "Heparanase Activity Expressed by Platelets, Neutrophils, and Lymphoma Cells Releases Active Fibroblast Growth Factor From Extracellular Matrix", Cell Regulation, 1: 833-842, 1990.	
	124	Godder et al. "Heparanase Activity in Cultured Endothelial Cells", Journal of Cellular Physiology, 148: 274-280, 1991.	
	125	Kato et al. "Physiological Degradation Converts the Soluble Syndecan-1 Ectodomain From An Inhibitor to A Potent Activator of FGF-2", Nature Medicine, 4(6): 691-697, 1998.	
	126	Jin et al. "Immunochemical Localization of Heparanase in Mouse and Human Melanomas", International Journal of Cancer, 45: 1088-1095, 1990.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office,

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 6 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	127	Hoogewerf et al. "CXC Chemokines Connective Tissue Activating Peptide-III and Neutrophil Activating Peptide-2 Are Heparin/Heparan Sulfate-Degrading Enzymes", Journal of Biological Chemistry, 270(7): 3268-3277, 1995.P.3269	
	128	Oldberg et al. "Characterization of A Platelet Endoglycosidase Degrading Heparin-Like Polysaccharides", Biochemistry, 19: 5755-5762, 1980.	
	129	Miyake et al. "Highly Specific and Sensitive Detection of Malignancy in Urine Samples From Patients With Urothelial Cancer by CD44v8-10/CD44v10 Competitive RT-PCR", Int. J. Cancer, 79(6): 560-564, 1998. Abstract.	
	130	Kang et al. "Prolactin-Inducible Enhancer Activity of the First Intron of the Bovine β-Casein Gene", Mol. Cells, 8(3): 259-265, 1998. Abstract.	
	131	Gottschalk et al. "Somatic Gene Therapy. Present Situation and Future Perspective", Arzneimittelforschung, 48(11): 1111-1120, 1998. Abstract.	
	132	Guriec et al. "CD44 Isoforms With Exon V6 and Mestastasis of Primary N0M0 Breast Carcinomas", Breast Cancer Res. Treat., 44(3):261-268, 1997. Abstract.	
	133	Vlodavsky et al. "Mammalian Heparanase: Gene Cloning, Expression and Function in Tumor Progression and Metastasis", Nature Medicine, 5(7): 793-802, 1999.	
	134	Faber-Elman et al. "Involvement of Wound-Associated Factors in Rat Brain Astrocyte Migratory Response to Axonal Injury: In Vitro Simulation", J. Clin. Invest., 97(1): 162-171, 1996.	
	135	Zheng et al. "Increment of hFIX Expression With Endogenous Intron 1 In Vitro", Cell Res., 7(1):21-29, 1997 Abstract.	
	136	Welch et al. "Expression of Ribozymes in Gene Transfer Systems to Modulate Target RNA Levels", Curr. Opin. Biotechnol., 9(5): 486-496, 1998. Abstract.	
	137	Gewirtz et al. "Facilitating Oligonucleotide Delivery: Helping Antisense Deliver on Its Promise", Proc. Natl. Acad. Sci. USA, 93: 3161-3163, 1996.	
	138	Green et al. "Antisense Oligonucleotides: An Evolving Technology for the Modulation of Gene Expression in Human Disease", Journal of American Cell Surgery, 191(1): 93-105, 2000.	
	139	Agrawal "Antisense Oligonucleotides: Towards Clinical Trials", TIBTech, 14: 376-387, 1996.	
	140	Rajur et al. "Covalent Protein-Oligonucleotide Conjugates for Efficient Delivery of Antisense Molecules", Bioconjugate Chem., 8: 935-940, 1997.	
	141	Luft " Making Sense Out of Antisense Oligodeoxynucleotide Delivery: Getting There Is Half the Fun". J. Mol. Med, P.75-76. 1998.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 7 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	142	Kronenwett et al. "Oligodeoxyribonucleotide Uptake in Primary Human Hematopoietic Cells Is Enhanced by Cationic Lipids and Depends on the Hematopoietic Cell Subset", Blood, 91(3): 852-862, 1998.	
	143	Flanagan et al. "Potent and Selective Gene Inhibition Using Antisense Oligodeoxynucleotides", Molecular and Cellular Biochemistry, 172: 213-225, 1997.	
	144	Aoki et al. "In Vivo Transfer Efficiency of Antisense Oligonucleotides Into the Myocardium Using HVJ-Liposome Method", Biochemical and Biophysical Research Communications, 231: 540-545, 1997.	
	145	Jayaraman et al. "Rational Selection and Quantitative Evaluation of Antisense Oligonucleotides", Biochimica et Biophysica Acta, 1520: 105-114, 2001.	
	146	Walton et al. "Prediction of Antisense Oligonucleotide Binding Affinity to A Structured RNA Target", Biotechnology and Bioengineering, 65(1): 1-9, 1999.	
	147	Wang et al. "Isolation and Characterization of Pseudomonas Aeruginosa Genes Inducible by Respiratory Mucus Derived From Cystic Fibrosis Patients", Mol. Microbiol., 22(5): 1005-1012, 1996. Abstract.	
	148	Davies et al. "Regulation of the Alginate Biosynthesis Gene AlgC in Pseudomonas Aeruginosa During Biofilm Development in Continuous Culture", Appl. Environ. Microbiol., 61(3): 860-867, 1995. Abstract.	
	149	Azghani et al. "A Beta-Linked Mannan Inhibits Adherence of Pseudomonas Aeruginosa to Human Lung Epithelial Cells", Glycobiology, 5(1): 39-44, 1995. Abstract.	
	150	Ofek et al. "Bacterial Adhesion to Cells and Tissues", Chapman & Hall, NY, P.114-118, 148-153, 418-423, 420-423, 1994.	
	151	Ghani et al. "Ceftazidime, Gentamicin, and Rifampicin, in Combination, Kill Biofilms of Mucoid Pseudomonas Aeruginosa", Can. J. Microbiol., 43(11): 999-1004, 1997. Abstract.	
	152	Gabriel et al. "In Vitro Adherence of Pseudomonas Aeruginosa to Four Intraocular Lenses", J. Cataract Refract Surg., 24: 124-129, 1998.	
	153	Pier "Rationale for Development of Immunotherapies That Target Mucoid Pseudomonas Aeruginosa Infection in Cystic Fibrosis Patients", Behring Inst. Mitt., 98: 350-360, 1997. Abstract.	
	154	Hatano et al. "Biologic Activities of Antobodies to the Neutral-Polysaccharide Component of the Pseudomonas Aeruginosa Lipopolysaccharide Are Blocked by O Side Chains and Mucoid Exopolysaccharide (Alginate)", Infect. Immun., 63(1): 21-26.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 8 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	155	Meluleni et al. "Mucoid Pseudomonas Aeruginosa Growing in A Biofilm In Vitro Are Killed by Opsonic Antibodies to the Mucoid Exopolysaccharide Capsule But Not by Antibodies Produced During Chtonic Lung Infection in Cystic Fibrosis Patients", J. Immun., 155(4): 2029-2038, 1995. Abstract.	
	156	Vernet et al. "Virulence Factors (Aerobactin and Mucoid Phenotype) in Klebsiella Pneumoniae and Escherichia Coli Blood Culture Isolates", FEMS Microbiol. Lett., 130(1): 51-57, 1995. Abstract.	
	157	Pier et al. "How Mutant CFTR May Contribute to Pseudomonas Aeruginosa Infection in Cystic Fibrosis", Am. J. Respir. Crit. Care Med., 154(4): S175-S182, 1996. Abstract.	
	158	Pier et al. "Cystic Fibrosis Transmembrane Conductance Regulator Is An Epithelial Cell Receptor for Clearance of Pseudomonas Aeruginosa From the Lung", Proc. Natl. Acad. Sci. USA, 94(22): 12088-12093, 1997.	
	159	Boucher et al. "Mucoid Pseudomonas Aeruginosa in Cystic Fibrosis: Characterization of Muc Mutations in Clinical Isolates and Analysis of Clearance in A Mouse Model of Respiratory Infection", Infect. Immun., 65(9): 3838-3846, 1997. Abstract.	
	160	Boucher et al. "Two Distinct Loci Affecting Conversion to Mucoidy Pseudomonas Aeruginosa in Cystic Fibrosis Encode Homologs of the Serine Protease HtrA", J. Bacteriol., 178(2): 511-523, 1996. Abstract.	
	161	Yu et al. "Microbial Pathogens in Cystic Fibrosis: Pulmonary Clearance of Mucoid Pseudomonas Aeruginosa and Inflammation in A Mouse Model of Repeated Respiratory Challenge", Infection and Immunity, 66(1): 280-288, 1998.	
	162	Van Heeckeren et al. "Excessive Inflammatory Response of Cystic Fibrosis Mice to Bronchopulmonary Infection With Pseudomonas Aeruginosa", J. Clin. Invest., 100(11): 2810-2815, 1997.	
	163	Cai et al. "Comparison of Sputum Processing Techniques in Cystic Fibrosis", Pediatr. Pulmonol., 22(6): 402-407, 1996. Abstract.	
	164	Hatch et al. "Alginate Lyase Promotes Diffusion of Aminoglycosides Through the Extracellular Polysaccharide of Mucoid Pseudomonas Aeruginosa", Antimicrob. Agents. Chemother., 42(4): 974-977, 1998. Abstract.	
	165	Speert et al. "Modulation of Macrophage Function for Defense of the Lung Against Pseudomonas Aeruginosa", Behring Inst. Mitt., 98: 274-282, 1997. Abstract.	
	166	Pina et al. "The Role of Fluoroquinolones in the Promotion of Alginate Synthesis and Antibiotic Resistance in Pseudomonas Aeruginosa", Curr. Microbiol., 35(2): 103-108, 1997. Abstract.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 9 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	167	Mengistu et al. "Continuous Culture Studies on the Synthesis of Capsular Polysaccharide by Klebsiella Pneumoniae K1", J. Appl. Bacteriol., 76(5): 424-430, 1994. Abstract.	
	168	Hsuch et al. "Invasive Streptococci Pneumoniae Infection Associated With Rapidly Fatal Outcome in Taiwan", J. Formos Med. Assoc., 95(5): 364-371, 1996. Abstract.	
	169	Moses et al. "Relative Contributions of Hyaluronic Capsule and M Protein to Virulence in A Mucoid Strain of the Group A Streptococcus", Infect. Immun., 65(1): 64-71, 1997.	
	170	Scott et al. "Visualization of An Extracellular Mucoid Layer of Treponema Denticola ATCC 35405 and Surface Sugar Lectin Analysis of Some Treponema Species", Oral Microbiol. Immunol., 12(2): 121-125, 1997. Abstract.	
	171	Nilsson et al. "The Role of Staphylococcal Polysaccharide Microcapsule Expression in Septricemia and Septic Arthritis", Infect. Immun., 65(10): 4216-21, 1997. Abstract.	
	172	Wessels et al. "Effects on Virulence of Mutations in A Locus Essential for Hyaluronic Acid Capsule Expression in Group A Streptococci", Infect. Immun., 62(2): 433-441, 1994. Abstract.	
	173	Farndale et al. "A Direct Spectrophotometric Microassay for Sulfated Glycosaminoglycans in Cartilage Cultures", Connective Tissue Research, 9: 247-248, 1982.	
	174	Pasquier et al. "Implication of Neutral Polysaccharides Associated to Alginate in Inhibition of Murine Macrophage Response to Pseudomonas Aeruginosa", FEMS Microbiol. Lett., 147(2): 195-202, 1997. Abstract.	
	175	Marty et al. "Influence of Nutrient Media on the Chemical Composition of the Expolysaccharide From Mucoid and Non-Mucoid Pseudomonas Aeruginosa", FEMS Microbiol. Letters, 77(1-3): 35-44, 1992. Abstract.	
	176	Jorba et al. "Variations in the P. Aeruginosa Polysaccharide Synthesis Conditioned by Aminosugars", Rev. Esp. Fisiol., 36(2): 155-161, 1980. Abstract.	
	177	Ramos et al. "Relationship Between Glycolysis and Exopolysaccharide Biosynthesis in Lactococcus Lactis", Appl. Environ. Microbiol., 67(1): 33-41, 2001. Abstract.	
	178	Bhaskar et al. "Dysregulation of Proteoglycan Production by Intraheptic Biliary Epithelial Cells Bearing Defective (Delta-f508) Cystic Fibrosis Transmembrane Conductance Regulator", Hepatology, 27(1): 7-14, 1998. Abstract.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 10 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	179	Vogel et al. "Production of Proteoglycans by Human Lung Fibroblasts (IMR-90) Maintained in A Low Concentration of Serum", Biochem. J., 207(3): 369-379. Abstract.	
	180	Hill et al. "Organ-Specific Over-Sulfation of Glycosaminoglycans and Altered Extracellular Matrix in A Mouse Model of Cystic Fibrosis", Biochem. Mol. Med., 62(1): 113-122, 1997. Abstract.	
	181	Welch et al. "Complex Saccharide Metabolism in Cystic Fibrosis Fibroblasts", Pediatr. Research, 9(9): 698-702, 1975.	
	182	Rahmoune et al. "Chrondroitin Sulfate in Sputum From Patients With Cystic Fibrosis and Chronic Bronchitis", Am. J. Resp. Cell & Mol. Biol., 5(4): 315-320, 1991. Abstract.	
	183	Beuth et al. "Lectin-Mediated Bacterial Adhesion to Human Tissue", Eur. J. Clin. Microbiol., 6(5): 591-593, 1987. Abstract.	
	184	Allison et al. "Polysaccharide Production in Pseudomonas Cepacia", J. Basic. Microbiol., 34(1): 3-10, 1994. Abstract.	
	185	Albus et al. "Staphylococcus Aureus Capsular Types and Antibody Response to Lung Infection in Patients With Cystic Fibrosis", J. Clin. Microbiol., 26(12): 2505-2509, 1988. Abstract.	
	186	Macone et al. "Mucoid Escherichia Coli in Cystic Fibrosis", The New England Journal of Medicine, 304(24): 1445-1449, 1981. Abstract.	
	187	Tatnell et al. "Characterisation of Alginates From Mucoid Strains of Pseudomonas Aeruginosa", Biochemical Society Transactions, 24: 404S, 1996.	
	188	Tatnell et al. "Chemical Analysis of Alginates From Mucoid Strains of Pseudomonas Aeruginosa", Biochemical Society Transactions, 22: 310S, 1994.	
	189	Tatnell et al. "Colonisation of Cystic Fibrosis Patients by Non-Mucoid Pseudomonas Aeruginosa - Characterisation of the Alginate From Mucoid Variants", Biochemical Society Transactions, 24: 406S, 1996.	
	190	Drigues et al. "Comparative Studies of Lipopolysaccharide and Exopolysaccharide From A Virulent Strain of Pseudomonas Solanacearum and From Three Avirulent Mutants", Journal of Bacteriology, 162(2): 504-509, 1985. Abstract.	
	191	Sutherland "Structure-Function Relationships in Microbial Exopolysaccharides", Biotech. Adv., 12: 393-448, 1994.	
	192	Anatolii "Hyaluronic Capsule as One of the Factors of Hemolytic Streptococcus Pathogenicity", Chem. Abstracts 86(17): 339, 1977. Abstr.118714 in Zh. Mikrobiol. Epidemiol. Immunobiol., 2: 22-27, 1977.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 11 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	193	Gospodarowicz et al. "Permissive Effect of the ExtraCellular Matrix on Cell Proliferation In Vitro", Proc. Natl. Acad. Sci. USA., 77(7): 4094-4098, 1980.	
	194	Li et al. "Immunochemical Localization of Heparanase in Mouse and Human Melanomas", Int. J. Cancer, 45: 1088-1095, 1990.	
	195	Soule et al. "Isolation and Characterization of A Spontaneously Immortalized Human Breast Epithelial Cell Line, MCF-10'", Cancer Res., 50: 6075-6086, 1990. Abstract.	
	196	Miller et al. "Xenograft Model of Progressive Human Proliferative Breast Disease", J. Nat. Cancer Inst., 85: 1725-1732, 1993. Abstract.	
	197	Nakajima et al. "Heparan Sulfate Degradation: Relation to Tumor Invasion and Metatastic Properties of Mouse B16 Melanoma Sublines", Science, 220: 611-613, 1983.	
	198	Kosir et al. "Early Human Breast Carcinoma Cells Produce Extra Cellular Heparanase", Molecular Biology/Biochemistry, Proceedings of the American Association for Cancer Research, 37: 495, 1996. Suppl. IDS in 22716;	
	199	Laskov et al. "Production of Heparanase by Normal and Neoplastic Murine - B-Lymphocytes", International Journal of Cancer, 47(1): 92-98, 1991.	
	200	Cordon-Cardo et al. "Expression of Basic Fibroblast Growth Factor in Normal Human Tissue", Laboratory Investigation, 63(6): 832-840, 1990. Abstract.	
	201	Hillier et al. "The WashU-Merck EST Project", No. N30824, Database GenBank on STN, US National Library of Medicine (Bethesda MD), 1996.	
	202	Hillier et al. "The WashU-Merck EST Project", No. N30845, Databse GenBank on STN, US National Library of Medicine (Bethesda MD), 1996.	
	203	Konstan et al. "Current Understanding of the Inflammatory Process in Cystic Fibrosis", Pediatric Pulmonology, 24: 137-142, 1997.	
	204	Dasgupta et al. "Reduction in Viscoelasticity in Cystic Fibrosis Sputum In Vitro Using Combined Treatment With Nacystelyn and RhDNase", Pediatric Pulmonology, 22: 161-166, 1996.	
	205	Boat et al. "Biochemistry of Airway Mucus Secretions", Fed. Proc., 39(13): 3067-3074, 1980. Abstract.	
	206	Mohapatra et al. "Alteration of Sulfation of Glycoconjugates, But Not Sulftate Transport and Intracellular Inorganic Sulfate Content in Cystic Fibrosis Airway Epithelial Cells", Pediatr. Res., 38(1): 42-48, 1995. Abstract.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 12 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	207	Cheng et al. "Increased Sulfaton of Glycoconjugates NY Cultured Nasal Epithelial Cells From Patients With Cystic Fibrosis", J. Clin. Invest., 84(1): 68-72, 1989. Abstract.	
	208	Boat et al. "Epithelial Cell Dysfunction in Cystic Fibrosis: Implications for Airways Disease", Acta Paediatr. Scand. Suppl., 363: 25-29, 1989.	
	209	Schwatz et al. "CpG Motifs in Bacterial DNA Cause Inflammation in the Lower Respiratory Tract", J. Clin. Invest., 100(1): 68-73, 1997. Abstract.	
	210	Barghouthi et al. "Nonopsonic Phagocytosis of Pseudomonas Aeruginosa Requires Facilitated Transport of D-Glucose by Macrophages", J. Immunol., 154(7): 3420-3428, 1995. Abstract.	
	211	Moser et al. "Chronic Pseudomonas Aeruginosa Lung Infection Is More Severe in Th2 Responding BALB/c Mice Compared to Th1 Responding C3H/HeN Mice", APMIS, 105(11): 838-842, 1997. Abstract.	
	212	Zahm et al. "Early Alterations in Airway Mucociliary Clearance and Inflamation of the Lamina Propria in CF Mice", Am. J. Physiol., 272(3 Pt 1): C853-C859, 1997. Abstract.	
	213	Thompson et al. "Identification of Chondroitin Sulfate E in Human Lung Mast Cells", J. Immunol., 140(8): 2708-2713, 1988. Abstract.	
	214	Giuffre et al. "Monocyte Adhesion to Activated Aortic Endothelium: Role of L-Selectin and Heparan Sulfate Proteoglycans", J. Cell Biol., 136(4): 945-956, 1997. Abstract.	
	215	Margolies et al. "Identification of A Major Heparin-Precitable Protein in Human Serum and Its Relationship to Cystic Fibrosis", Pediatr. Res., 16(3): 181-186, 1982. Abstract.	
	216	Leong et al. "Different Classes of Proteoglycans Contribute to the Attachment of Borrelia Burgdorferi to Cultured Endiothelial and Brain Cells", Infect. Immun., 66(3): 994-999, 1998. Abstract.	
	217	Asagoe et al. "Effect of Heparin on Infection of Cells by Equine Arteritis Virus", J. Vet. Med. Sci., 59(8): 727-728, 1997. Abstract.	
	218	Krusat et al. "Heparin-Dependent Attachment of Respiratory Syncytial Virus (RSV) to Host Cells", Arch. Virol., 142(6): 1247-1254, 1997. Abstract.	
	219	Hagiwara et al. "Inhibitory Effect of Heparin on Red Blood Cell Invasion by Theileria Sergenti Merozoites", Int. J. Parasitol., 27(5): 535-539, 1997. Abstract.	
	220	Shakibaei et al. "Dual Interaction of the Malaria Circumsporozoite Protein With the Low Density Lipoprotein Receptor-Related Protein (LRP) and Heparan Sulfate Proteoglycans", J. Exp. Med., 184(5): 1699-1711, 1996. Abstract.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(*use as many sheets as necessary*)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet	13	Of	27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	221	Jusa et al. "Effect of Heparinon Infection of Cells by Porcine Reproductive and Respiratoy Syndrome Virus", Am. J. Vet. Res., 58(5): 488-491, 1997. Abstract.	
	222	Chen et al. "Dengue Virus Infectivity Depends on Envelope Protein Bin to Target Cell Heparan Sulfate", Nature Medicine, 3(8): 866-871, 1997. Abstract.	
	223	Gantt et al. "Cell Adhesion to A Motif Shared by the Malaria Circumsporozoite Protein and Thrombospondin Is Mediated by Its Glycosminoglycan-Binding Region and Not by CSVTCG", J. Biol. Chem., 272(31): 19205-19213, 1997. Abstract.	
	224	Robert et al. "Chondroitin-4-Sulphate (Proeoglycan), A Receptor for Plasmodium Falciparum-Infected Erthrocyte Adherence on Brain Microvascular Endothelial Cells", Res. Immunol., 146(6): 383-393, 1995. Abstract.	
	225	Berkow "The Merck Manual", Merck Research Laboratories, P.201, 204, 1308, 177-179, 1016-1017, 194-197, 885, 601, 1997.	
	226	Konstan et al. "Patterns of Medical Practice in Cystic Fibrosis: Part II. Use of Therapies", Pediatr. Pulmonol,. 28(4): 248-54, 1999. Abstract.	
	227	Frederiksen et al. "Antibiotic Treatment of Initial Colonization with Pseudomonas Aeruginosa Postpones Chronic Infection and Prevents Deterioraton of Pulmonary Function in Cystic Fibrosis", Pediatr. Pulmonol. 23(5): 330-335, 1997. Abstract.	
	228	Frederiksen et al. "Changing Epidemiology of Pseudomonas Aeruginosa Infection in Danish Cystic Fibrosis Patients (1974-1995)", Pediatr. Pulmonol., 28(3): 159-166, 1999. Abstract.	
	229	Ramsey et al. "Intermittent Administraton of Inhaled Tobramycin in Patients With Cystic Fibrosis. Cystic Fibrosis Inhaled Tobramycin Study Group", New England Journal of Medicine, 340(1): 23-30, 1999. Abstract.	
	230	Tang et al. "Contribution of Specific Pseudomonas Aeruginosa Virulence Factors to Pathogenesis of Pneumonia in A Neonatal Mouse Model of Infection", Infect. Immun., 64(1): 37-43, 1996. Abstract.	
	231	Bennett et al. "Effect of Uridine 5'-Triphosphate Plus Amiloride on Mucociliary Clearance in Adult Cystic Fibrosis", Am. J. Respir. Crit. Care Med., 153(6 Pt.1): 1796-1801, 1996. Abstract.	
	232	Armstrong et al. "Lower Airway Inflammation in Infants and Young Children With Cystic Fibrosis", Am. J. Respir. Crit. Care Med., 156(4 Pt.1): 1197-1204, 1997. Abstract.	
	233	Naparstek et al. "Activated T Lymphocytes Produce A Matrix-Degrading Heparan Sulphate Endoglycosidase", Nature, 310(5974): 241-244, 1984. Abstract.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 14 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	234	Weller "Implications of Early Inflamation and Infection in Cystic Fibrosis: A Review of New and Potential Interventions", Pediatric Pulmonology, 24: 143-146, 1997.	
	235	Rubin "Emerging Therapies for Cystic Fibrosis Lung Disease", Chest, 115: 1120-1126, 1999.	
	236	Ducy et al. "The Osteoblast: A Sophisticated Fibroblast Under Central Surveillance", Science, 289: 1501-1504, 2000.	
	237	Reddi "Role of Morphogenetic Proteins in Skeletal Tissue Engineering and Regeneration", Nature Biotechnology, 16: 247-252, 1998.	
	238	Elkin et al. "Heparanase as Mediator of Angiogenesis: Mode of Action", The FASEB Journal, 15: 1661-1663, 2001.	
	239	Elkin et al. "Heparanase as Mediator of Angiogenesis: Mode of Action", The FASEB Journal, Published Online, 10 P. 2001.	
	240	Finkel "Potential Target Found for Antimetastasis Drugs", Science, 285: 33-34, 1999.	
	241	Webster et al. "FGFR Activation in Skeletal Disorders: Too Much of A Good Thing", TIG, 13(5): 178-182, 1997.	
	242	Shimazu et al. "Syndecan-3 and the Control of Chondrocyte Proliferation During Endochondral Ossification", Exp. Cell. Res., 229(1): 126-136, 1996. Abstract.	
	243	Blanquaert et al. "CMDBS, Functional Analogs of Sulfate Heparanes, Used as Osseous Cicatrizing Agents", Ann. Endocrinol., 55(2): 121-123, 1994. Abstract.	
	244	Blanquaert et al. "Heparan-Like Molecules Induce the Repair of Skull Defects", Bone, 17(6): 499-506, 1995. Abstract.	
	245	Muir et al. "Histomorphometric Analysis of the Effects of Standard Heparin on Trabecular Bone In Vivo", Blood, 88(4): 1314-1320, 1996. Abstract.	
	246	Hoffman et al. "Human Bone Morphogenic Protein 2 Contains A Heparin-Binding Site Which Modifies Its Biological Activity", Eur. J. Biochem., 237(1): 295-302, 1996. Abstract.	
	247	Imai et al. "Osteoblast Recruitment and Bone Formation Enhanced by Cell Matrix-Associated Heparin-Binding Growth-Associated Molecule (HB-GAM)", J. Cell. Biol. 143(4): 1113-1128, 1998. [Abstract]	
	248	Loredo et al. "Regulation of Glycosaminoglycan Metabolism by Bone Morphogenetic Protein-2 in Equine Cartilage Explant Cultures", Am. J. Vet. Res., 57(4): 554-559, 1996.	
	249	Kiberstis et al. "Bone Health in the Balance", Science, 289: 1497, 2000.	
	250	Service "Tissue Engineers Build New Bone", Science, 289: 1498-1500, 2000.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 15 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	251	Stracke et al. "Autotaxin, Tumor Motility-Stimulating Exophosphodiesterase", Advan. Enzyme Regul., 37: 135-144, 1997. Introduction.	
	252	Bost et al. "Antibodies Against A Peptide Sequence Within the HIV Envelope Protein Crossreacts With Human Interleukin-2", Immunol. Invest., 17: 577-586, 1988.	
	253	Bendayan "Possibilities of False Immunocytochemical Results Generated by the Use of Monoclonal Antibodies: The Example of the Anti-Proinsulin Antibody", J. Histochem. Cytochem. 43: 881-886, 1995	
	254	Bar-Ner et al. "Inhibition of Heparanase-Mediated Degradation of Extracellular Matrix Heparan Sulphate by Non-Anticoagulant Heparin Species", Blood, 70(2): 551-557, 1987.	
	255	Savitsky et al. "Ataxia-Telangiectasia: Structural Diversity of Untranslated Sequences Suggests Complex Post-Transcriptional Regulation of ATM Gene Expression", Nucleic Acids Research, 25(9): 1678-1684, 1997.	
	256	Shieh et al. "Cell Surface Receptors for Herpes Simplex Virus Are Heparan Sulfate Proteoglycan Proteoglycans", J. Cell. Biol., 116(5): 1273-1281, 1992.	
	257	Lider et al. "A Disaccharide That Inhibits Tumor Necrosis Factor ? Is Formed From the Extracellular Matrix by the Enzyme Heparanase", Proc. Natl. Acad. Sci. USA, 92: 5037-5041, 1995.	
	258	Spivak-Kroizman et al. "Heparin-Induced Oligomerization of FGF Molecules Is Responsible For FGF Receptor Dimerization, Activation, and Cell Proliferation", Cell, 79: 1015-1024, 1994.	
	259	Vlodavsky et al. "Endothelial Cell-Derived Basic Fibroblast Growth Factor: Synthesis and Deposition Into Subendothelial Extra-Cellular Matrix", Proc. Natl. Acad. Sci. USA, 84: 2292-2296, 1987.	
	260	Vlodavsky et al. "Involvement of the ExtraCellular Matrix, Heparin Sulfate Proteoglycans, and Heparin Sulfate Degrading Enzymes in Angiogenesis and Metastis", Tumor Angeogenesis, P.125-140, 1997.	
	261	Hillier et al. "The WashU-Merck EST Project" GenBank Entry N32056, 1996. Claims: 9, 10.	
	262	Adams et al. "Initial Assesment of Human Gene Diversity and Expression Patterns Based Upon 83 Million Nucleotides of cDNA Sequence", Nature, 377(6547): 3-174, 1995. GenBank Entry AA304653, 1997. Claims: 30.	
	263	Yagel et al. "Normal Nonmetastatic Human Trophoblast Cells Share In Vitro Invasive Properties of Malignant Cells", J. Cellular Physiology, 136: 455-462, 1988.	
	264	Kizaki et al. "Cloning and Localization of Heparanase in Bovine Placenta", Placenta, 24: 424-430, 2003.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 16 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	265	Dempsey et al. "Heparanase Expression in Invasive Trophoblasts and Acute Vascular Damage", Glycobiology, 10(5): 467-475, 2000. Abstract, P.470, Col.1 - P.471, Col.1, P.472, Col.1, § 4 - Col.2, § 2.	
	266	Haimov-Kochman et al. "Localization of Hepranase in Normal and Pathological Human Placenta", Molecular Human Reproduction, 8(6): 566-573, 2002.	
	267	Kizaki et al. "Expression of Heparanase mRNA in Bovine Placenta During Gestation", Reproduction, 121: 573-580, 2001.	
	268	Edwards et al. "Some Properties and Applications of Monoclonal Antibodies", Biochem. Journal, 200: 1-10, 1981.	
	269	Zhou et al. "HFE Gene Knockout Produces Mouse Model of Hereditary Hemochromatosis", PNAS, 95(5): 2492-2497, 1998.	
	270	Menezo et al. "Mouse and Bovine Models for Human IVF", Reproductive BioMedicine Online 2002, 4(2): 170-175, 2002. Abstract.	
	271	Bean et al. "Fertilization In Vitro Increases Non-Disjunction During Early Cleavage Divisions in A Mouse Model System", Human Reproduction, 17(9): 2362-2367, 2002. Abstract.	
	272	Brinster et al. "Restoration of Fertility by Germ Cell Transplantation Requires Effective Recipient Preparation", Biology of Reproduction 69: 412-420, 2003. Abstract.	
	273	Liu et al. "Live Offspring by In Vitro Fertilization of Oocytes From Cryopreserved Primordial Mouse Follicles After Sequential In Vivo Transplantation and In Vitro Maturation", Biology of Reproduction, 64: 171-178, 2001. Abstract.	
	274	Kawase et al. "Effect of Partial Incision of the Zona Pellucida by Piezo-Micromanipulator for In Vitro Fertilization Using Frozen-Thawed Mouse Spermatozoa on the Developmental Rate of Embryos Transferred at the 2-Cell Stage", Biology of Reproduction, 66: 3810385, 2002. Abstract.	
	275	Pfaff et al. "Cryobiology of Rat Embryos I: Determination of Zygote Membrane Permeability Coefficients for Water and Cryoprotectants, Their Activation Energies, and the Development of Improved Cryopreservation Methods" , Biology of Reproduction, 63: 1294-1302, 2000. Abstract.	
	276	Yesildaglar et al. "The Mouse as A Model to Study Adhesion Formation Following Endoscopic Surgery: A Preliminary Report", Human Reproduction, 14(1): 55-59, 1999. Abstract.	
	277	Ejima et al. "Induction of Apoptosis in Placentas of Pregnant Mice Exposed to Lipopolysaccharides: Possible Involvement of Fas/Fas Ligand System", Biology of Reproduction, 62: 178-185, 2000. Abstract.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 17 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	278	Prahalada et al. "Diethylstilbestrol-Induced Cervical and Vaginal Adenosis Using the Neonatal Mouse Model", Biology of Reproduction, 38: 935-943, 1988. Abstract.	
	279	Newbold et al. "Exposure to Diethylstilbestrol During Pregnancy Permanently Alters the Ovary and Oviduct", Biology of Reproduction, 28: 735-744, 1983. Abstract.	
	280	Jin et al. "Molecular Cloning and Expression of Human Heparanase cDNA", Proceedings American Association for Cancer Research Annual Meeting, 1992, 33: 57, 1992. Abstract.	
	281	Colman "Effects of Amino Acid Sequence Changes on Antibody-Antigen Interactions", Research in Immunology, 145(1): 33-36. 1994.	
	282	Ferber et al. "Pancreatic and Duodenal Homeobox Gene 1 Induces Expression of Insulin Genes in Liver and Ameliorates Streptozotocin-Induced Hyperglycemia", Nature Medicine, 6(5): 568-572, 2000.	
	283	Benjamin et al. "A Plasticity Window for Blood Vessel Remodelling Is Defined by Pericyte Coverage of the Preformed Endothelial Network and Is Regulated by PDGF-B and VEGF", Development, 125: 1591-1598, 1998.	
	284	Vukicevic et al. "Induction of Nephrrogenic Mesenchyme by Osteogenic Protein 1 (Bone Morphogenetic Protein 7)", Proc. Natl. Acad. Sci. USA, 93: 9021-9026, 1996.	
	285	Massague "The TGF-BETA Family of Growth and Differentiation Factors", Cell, 49: 437-438, 1987.	
	286	Pilbeam et al. "Comparison of the Effects of Various Lengths of Synthetic Human Parathyroid Hormone-Related Peptide (hPTHrP) of Malignancy on Bone Resorption and Formation in Organ Culture", Bone, 14: 717-720,1993.	
	287	Skolnick et al. "From Genes to Protein Structure and Function: Novel Applications of Computational Approaches in the Genomic Era", Trends in Biotechnology, 18: 34-39, 2000.	
	288	Bork "Powers and Pitfalls in Sequence Analysis: The 70% Hurdle", Genome Research, 10 : 398-400, 2000.	
	289	Doerks et al. "Protein Annotation: Detective Work for Function Prediction", Trends in Genetics, 14(6): 248-250, 1998. Suppl. IDS in 22716;	
	290	Smith et al. "The Challenges of Genome Sequence Annotation or 'The Devil Is in the Details'", Nature Biotechnology, 15: 1222-1223, 1997.	
	291	Brenner "Errors in Genome Annotation", Trends in Genetics, 15(4): 132-133, 1999.	
	292	Bork "Go Hunting in Sequence Databases But Watch Out for the Traps", Trends in Genetics, 12(10): 425-427, 1996.	
	293	Bowie et al. "Deciphering the Message in Protein Sequences: Tolerance to Amino Acid Substitutions", Science, 247: 1306-1310, 1990.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 18 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	294	Bendig et al. "Humanization of Rodent Monoclonal Antibodies by CDR Grafting", Methods in Enzymology, 8: 83-93, 1995.	
	295	Goshen et al. "Purification and Characterization of Placental Heparanase and Its Expression by Cultured Cytotrophoblasts", Molecular Human Reproduction, 2(9): 679-684, 1996.	
	296	Coligan et al. "Current Protocols in Immunology", Immunology - Laboratory Manuals, 1991.	
	297	Sasisekharan et al. "Cloning and Expression of Heparinase I Gene From Flavobacterium Heparinum", Proc. Natl. Acad. Sci. USA, 90: 3660-3664, 1993.	
	298	Gordon-Cardo et al. "Expression of Basic Fibroplast Growth Factor in Normal Human Tissues", Laboratory Investigation, 63: 832-840, 1990. Abstract.	
	299	Yoshida "Effects of Basic Fibroblast Growth Factor on the Development of Mouse Preimplantation Embryos", Nippon Sanka Fujinka Gakkai Zasshi, 48(3): 170-176, 1996. Abstract.	
	300	Carson et al. Mucin and Proteoglucan Functions in Embryo Implantation", BioEssays, 20(7): 577-583, 1998. Abstract, P.580, Col.2 , § 2, P.582, Col 1, Fig.1.	
	301	Abrahamsohn et al. "Implantation and Decidualization in Rodents", J. Exp. Zool., 266(6): 603-628, 1993. Abstract.	
	302	Watson et al. "A Growth Factor Phenotype Map for Ovine Preimplantation Development", Biology of Reproduction, 50(4): 725-733, 1994. Abstract.	
	303	Novagen "PET System Manual", Novagen, 6th Ed., P.11, 1995.	
	304	Ennis et al. "Rapid Cloning of HLA-A,B cDNA by Using the Polymerase Chain Reaction: Frequency and Nature of Errors Produced in Amplification", PNAS USA, 87: 2833-2837, 1990.	
	305	Gilat et al. "Molecular Behaviour Adapts to Context: Heparanase Functions as An Extracellular Matrix-Degrading Enzyme or as A T-Cell Adhesion Molecule, Depending on the Local PH", Journal of Experimental Medicine, 181: 1929-1934, 1995.	
	306	Murphy et al. "The Latent Collagenase and Gelatin of Human Polymorphonuclear Neutrophil Leucicytes", Biochem. J., 192: 517-525, 1980.	
	307	Chubet et al. "Vectors for Expression and Secretion of FLAG Epitope-Tagged Proteins in Mammalian Cells", BioTechniques, 20: 136-141, 1996.	
	308	Chang et al. "Differential Ability of Heparan Sulfate Protecoglycans to Assemble the Fibroblast Growth Factor Receptor Complex In Situ", FASEB Journal, 14: 137-144, 2000.	
	309	Hillier et al. "The WashU-Merck EST Project", Database EMBL Accession No. N45367, XP 002198420, 1996. Abstract.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 19 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	310	Marra et al. ""The WashU-HHMI Mouse EST Project", Database EMBL, Accession No. Al122034, XP 002198426, 1998. Abstract.	
	311	Marra et al. "The WashU-HHMI Mouse Est Project", Database EMBL, Accession No. AA047943, XP002198424, 1996.	
	312	Evans et al. "Human Chromosome 11 187a8 Cosmid, Complete Sequence", Database EMBL, Accession No. U73640, XP002198427, 1996. Abstract.	
	313	Suggs et al. "Use of Synthetic Oligonucleotides as Hybridization Probes: Isolation of Cloned cDNA Sequences for Human β2-Microglobulin", Proc. Natl. Acad. Ssci. USA, 78(11): 6613-6617, 1981. P.6613.	
	314	Ehle et al. "Immunoaffinity Chromatography of Enzymes", Bioseparation, 1(2): 97-110, 1990.	
	315	Nadav et al. "Activation, Processing and Trafficking of Extracellular Heparanase by Primary Human Fibroblasts", Journal of Cell Science, 115(10): 2179-2187, 2002.	
	316	Goldshmidt et al. "Cell Surface Expression and Secretion of Heparanase Markedly Promote Tumor Angiogenesis and Metastasis", Proc. Natl. Acad. Sci. USA, 99(15): 10031-10036, 2002.	
	317	Guo et al. "Protein Tolerance to Random Amino Acid Change", PNAS, 101(25): 9205-9210, 2004.	
	318	Dibrino "RT-PCR Method & Applications", Clonotech Laboratories, 1st Ed., 1: 11, 15, 23, 41, 26, 1991.	
	319	Zcharia et al. "Heparanase Regulates Murine Hair Growth", American Journal of Pathology, 166(4): 999-1008, 2005.	
	320	Zhu et al. "Development of Heritable Melanoma in Transgenic Mice", The Journal of Investigative Dermatology, 110: 247-252, 1998.	
	321	Duff "Transgenic Mice Overexpressing Presenilin cDNAs: Phenotype and Utility in the Modeling of Alzheimer's Disease", Central Nervous System Diseases, P.123-128, 2000. Abstract.	
	322	Doetschman "Interpretation of Phenotype in Genetically Engineered Mice", Laboratory Animal Science, 49(2): 137-143, 1999.	
	323	Wall "Transgenic Livestock: Progress and Prospects for the Future", Theriogenology, 45: 57-68, 1996.	
	324	Mullins et al. "Fulminant Hypertension in Transgenic Rats Harbouring the Mouse Ren-2 Gene", Nature, 344: 541-544, 1990.	
	325	Hammer et al. "Spontaneous Inflammatory Disease in Transgenic Rats Expressing HLA-B27 and Human ?2m: An Animal Model of HLA-B27-Associated Human Disorders", Cell, 63: 1099-1112, 1990.	
	326	Taurog et al. "HLA-B27 in Inbred and Non-Inbred Transgenic Mice", The Journal of Immunology, 141(11): 4020-4023, 1988.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office,

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 20 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	327	Pearce et al. "Development of Glucose Intolerance in Male Transgenic Mice Overexpressing Human Glycogen Synthase Kinase-3? on A Muscle-Specific Promoter", Metabolism, 53(10): 1322-1330, 2004.	
	328	Li et al. "In Vivo Fragmentation of Heparan Sulfate by Heparanase Overexpression Renders Mice Resistant to Amyloid Protein A Amyloidosis", PNAS, 102(18): 6473-6477, 2005.	
	329	Zcharia et al. "Heparanase Acclerates Wound Angiogenesis and Wound Healing in Mouse and Rat Models", The FASEB Journal, 19: 211-221, 2005.	
	330	Zcharia et al. "Molecular Properties and Involvement of Heparanase in Cancer Progression and Mammary Gland Morphogenesis", Journal of Mammary Gland Biology and Neoplasia, 6(3): 311-322, 2001.	
	331	Nadir et al. "Co- Interaction and Increased Release of Tissue Factor Pathway Inhibitor by Heparanase", Blood, 106(11/Part 2): 90B, 2005. Abstract# 4038.	
	332	Spiegel et al. "Heparanase Facilitates Development and SDF-1 Induced Migration of Hematopoietic Stem and Progenitor Cells", Blood, 102(11): 825a-826a, 2003. Abstract# 3056.	
	333	Zcharia et al. "Transgenic Expression of Mammalian Heparanase Uncovers Physiological Functions of Heparan Sulfate in Tissue Morphogenesis, Vascularization, and Feeding Behavior", The FASEB Journal, 18: 252-263, 2004.	
	334	Nasser et al. "Heparanase Neutralizes the Anticoagulation Properties of Heparin and Low-Molecular-Weight Heparin", Journal of Thrombosis and Haemostasis, 4: 560-565, 2006.	
	335	Mullins et al. "Expression of the DBA/2J Ren-2 Gene in the Adrenal Gland of Transgenic Mice", The EMBO Journal, 8(13): 4065-4072, 1989.	
	336	McKenzie et al. "Biochemical Characterization of the Active Heterodimer Form of Human Heparanase (Hpa1) Protein Expressed in Insect Cells", Biochemical Journal, 373: 423-435, 2003.	
	337	Nakajima "Heparanases and Tumor Metastasis", Tanpakushitsu Kakusan Koso, 37(11): 1753-1758, 1992. Abstract.	
	338	Ricoveri et al. "Heparan Sulfate Endoglycosidase and Metastatic Potential in Murine Fibrosarcoma and Melanoma", Cancer Research, 46(8): 3855-3861, 1986. Abstract.	
	339	Wight et al. "Cell Biology of Arterial Proteoglycans", Arteriosclerosis, 9(1): 1-20, 1989.	
	340	Vlodavsky et al. "Expression of Heparanase by Platelets and Circulating Cells of the Immune System: Possible Involvement in Diapedesis and Extra Vasation", Invasion & Metastasis, 12(2): 112-127, 1992. Abstract.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to omplete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office,

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 21 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	341	Vlodavsky et al. "Lymphoma Cell-Mediated Degradation of Sulfated Proteoglycans in the Subendothelial ExtraCellular Matrix: Relationship to Tumor Cell Metastasis", Cancer Research, 43: 2704-2711, 1983.	
	342	Vlodavsky et al. "Involvement of Heparanase in Tumor Metastasis and Angiogenesis", Isr. J. Med. Sci., 24(9-10): 464-470, 1988.	
	343	Vlodavsky et al. "Morphological Appearance, Growth Behaviour and Migratory Activity of Human Tumor Cells Maintained on Extracellular Matrix Versus Plastic", Cell, 19: 607-616, 1980.	
	344	Vlodavsky et al. "Extracellular Sequestration and Release of Fibroblast Growth Factor: A Regulatory Mechanism?", Trends Biochem. Sci., 16: 268-271, 1991.	
	345	Ishai-Michaeli et al. "Importance of Size and Sulfation of Heparin in Release of Basic Fibroblast Growth Factor From the Vascular Endothelium and ExtraCellular Matrix", Biochemistry, 31(7): 2080-2088, 1992. Abstract.	
	346	Haimovits-Friedman et al, "Activation of Platelet Heparitinase by Tumor Cell-Derived Factors", Blood, 78(3): 789-796, 1991.	
	347	Miao et al. "Modulation of Fibroblast Growth Factor-2 Receptor Binding Dimerization, Signaling, and Angiogenic Activity by A Synthetic Heparain-Mimicking Polyaromatic Compound", J. Clin. Invest., 99(7): 1565-1575, 1997.	
	348	Benezra et al. "Reversal of Fibroblast Growth Factor-Mediated Autocrine Cell Transformation by Aromatic Anionic Compounds", Cancer Research, 52: 5656-5662, 1992.	
	349	Irimura et al. "Chemically Modified Heparins as Inhibitors of Heparan Sulfate Specific Endo-β-Glucuronidase (Heparanase) of Metastatic Melanoma Cells", Biochemistry, 25: 5322-5328, 1986. Abstract.	
	350	Coombe et al. "Analysis of the Inhibition of Tumor Metastasis by Sulphated Polysaccharides", Int. J. Cancer, 39: 82-88, 1987. Abstract.	
	351	Ornitz et al. "Heparin Is Required for Cell-Free Binding of Basic Fibroblast Growth Factor to A Soluble Receptor and for Mitogenesis in Whole Cells", Molecular and Cellular Biology, 12: 240-247, 1992.	
	352	Yayon et al. "Cell Surface, Heparin-Like Molecules Are Required for Binding of Basic Fibroblast Growth Factor to Its High Affinity Receptor", Cell, 64: 841-848, 1991.	
	353	Aviezer et al. "Differential Structural Requirements of Heparin and Heparan Sulfate Proteoglycans That Promote Binding of Basic Fibroblast Growth Factor to Its Receptor", J. Biol. Chem., 269(1): 114-121, 1994.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 22 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	354	Bartlett et al. " Comparative Analysis of the Ability of Leucocytes, Endothelial Cells, and Platelets to Degrade the Subendothelial Basement Membrane: Evidence for Cytokine Dependence and Detection of A Novel Sulfatase", Immunology and Cell Biol., 73: 113-124, 1995.	
	355	Nakajima et al. " A Solid-Phase Substrate of Heparanase: Its Application to Assay of Human Melanoma for Heparan Sulfate Degradative Activity", Analytical Biochemistry, 157: 162-171, 1986.	
	356	Oosta et al. "Purification and Properties of Human Platalets Heparitanase", J. Biol. Chem., 257(19): 11249-11255, 1982.	
	357	Sewell et al. "Human Mononuclear Cells Contain An Endoglycosidase Specific for Heparan Sulfate Glycosaminoglycan Demonstrable With the Use of A Specific Solid-Phase Metabolically Radiolabelled Substrate", Biochem J., 264: 777-783, 1989.	
	358	Freeman et al. "A Rapid Quantitative Assay for the Detection of Mammalian Heparanase Activity", Biochemical Journal, 325: 229-237, 1997.	
	359	Taylor et al. "A Colorimetric Method for the Quantitation of Uronic Acids and A Specific Assay for Galacturonic Acid", Analytical Biochemistry, 201: 190-196, 1992.	
	360	Basu et al. " Analysis of Glycospingolipids by Fluorophore-Assisted Carbohydrate Electrophoresis Using Ceramide Glycanase From Mercenaria Mercenaria", Analytical Biochemistry, 222: 270-274, 1994.	
	361	Jackson "The Use of Polyacrylamide-Gel Electrophoresis for the High-Resolution of Separation of Reducing Saccharides Labelled With the Fluorophore 8-Aminonaphtalene-1, 3, 6-Trisulphonic Acid", Biochem J., 270: 705-713, 1990.	
	362	De Vouge et al. "Immunoselection of GRP94/Endoplasmin From A KNRK Cell-Specific ?gt11 Library Using Antibodies Directed Against A Putative Heparanase Amino-Terminal Peptide", Int. J. Cancer, 56: 286-294, 1994.	
	363	Goldberg et al. "An Improved Method for Determining Proteoglycans Synthesized by Chondrocytes in Culture", Live Tissue Research, 24: 265-275, 1990.	
	364	Vlodavsky et al. "Morphological Appearance, Growth Behaviour and Migratory Activity of Human Tumor Cells Maintained on Extracellular Matrix Versus Plastic", Cell, 19: 607-616, 1980.	
	365	Eisenberg et al. "Lipoprotein Lipase Enhances Binding of Lipoproteins to Heparan Sulfate on Cell Surface and Extracellular Matrix", Journal of Clinical Investigation, 90: 2013-2021, 1992.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 23 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	366	Gitay-Goren et al. "The Binding of Vascular Endothelial Growth Factor to Its Receptors Is Dependent on Cell Surface-Associated Heparin-Like Molecules", Journal of Biological Chemistry, 267(9): 6093-6098, 1992.	
	367	Matzner et al. "Degradation of Heparan Sulfate in the Subendothelial Extracellular Matrix by A Readily Released Heparanase From Human Neutrophils'", Journal of Clinical Investigation, 76(4): 1306-1313, 1985.	
	368	Mollinedo et al. "Major Co-Localization of the Extracellular-Matrix Degradative Enzymes Heparanase and Gelatinase in Tertiary Granules of Human Neutrophils", Biochemical Journal, 327: 917-923, 1997.	
	369	Narindrasorasak et al. "High Affinity Interactions Between the Altzheimer's ?-Amyloid Precursor Proteins and the Basement Membrane Form of Heparan Sulfate Proteoglycan", J. Biol. Chem., 266(20): 12878-12883, 1991.	
	370	Zhong-Sheng et al. "Role of Heparan Sulfate Proteoglycans in the Binding and Uptake of Apolipoprotein E-Enriched Remnant Lipoproteins by Cultured Cells", J. Biol. Chem., 268(14): 10160-10167, 1993.	
	371	Hudson "Recombinant Antibody Fragment", Curr. Opin. Biotech., 4:395-402, 1998. Abstract.	
	372	Schoepe et al. "Neutralization of Hemolytic and Mouse Lethal Activities of C. Perfringens Alpha-Toxin Need Simultaneous Blockage of Two Epitopes by Monoclonal Antibodies", Microb. Pathogenesis, 23(1): 1-10, 1997. Abstract.	
	373	Mateo et al. "Humanization of A Mouse Monoclonal Antibody That Blocks the Epidermal Growth Factor Receptor: Recovery Antagonistic Activity", Immunotechnology, 3: 71-81, 1997. Abstract.	
	374	Nakajima et al. "Heparanases and Tumor Metastasis", Journal of Cellular Biochemistry, 36(2): 157-167, 1988.	
	375	Ngo et al. "Computational Complexity, Protein Structure Prediction, and the Levinthal Paradox", The Protein Folding Problem and Tertiary Structure Prediction, Birkhauser, Boston, P.433, 492-495, 1994.	
	376	Lederman et al. "A Single Amino Acid Substitution in A Common African Allele of the CD4 Molecule Ablates Binding of the Monoclonal Antibody, OKT4", Molecular Immunology, 28: 1171-1181, 1991.	
	377	Li et al. "β-Endorphin Omission Analogs: Dissociation of Immunoreactivity From Other Biological Activities", PNAS, 77: 3211-3214, 1980.	
	378	Marchetti et al. "Neurotrophin Stimulation of Human Melanoma Cell Invasion: Selected Enhancement of Heparanase Activity and Heparanase Degradation of Specific Heparan Sulfate Subpopulations", Cancer Research, 56: 2856-2863, 1996. Also in: Advances in Enzyme Regulation, 37: 111-134, 1997.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN

Sheet	24	Of	27	Attorney Docket Number	30337

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	379	Kosir et al. "Human Prostate Carcinoma Cells Produce Extracellular Heparanase", Journal of Surgical Research, 67: 98-105, 1997.	
	380	Köhler et al. "Continuous Cultures of Fused Cells Secreting Antibody of Predefined Specificity", Nature, 256: 495-497, 1975.	
	381	Hulett et al. "Cloning of Mammalian Heparanase, An Important Enzyme in Tumor Invasion and Metastasis", Nature Medicine, 5(7): 803-809, 1999.	
	382	Toyoshima et al. "Human Heparanase: Purification, Characterization, Cloning, and Expression", J. Biolog. Chemistry, 274(34): 24153-24160, 1999.	
	383	Kussie et al. "Cloning and Functional Expression of A Human Heparanase Gene", Biochemical and Biophysical Research Communication, 261(1): 183-187, 1999.	
	384	Walch et al. "Correlation of Overexpression of the Low-Affinity p75 Neutrotrophin Receptor With Augmented Invasion and Heparanase Production in Human Malignant Melanoma Cells", Int. J. Cancer, 82: 112-120, 1999.	
	385	Freeman et al. "Evidence That Platelet and Tumour Heparanases Are Similar Enzymes", Biochem J., 342: 361-368, 1999. Suppl. IDS in 25783;	
	386	Ernst et al. "Enzymatic Degradation of Glycosaminoglycans", Crit. Rev. in Biochemistry and Molecular Biology, 30(5): 387-444, 1995.	
	387	Zhou et al. "A 182 Bp Fragment of the Mouse Proα1(11) Collagen Gene Is Sufficient to Direct Chondrocyte Expression in Transgenic Mice", J. Cell Science, 108: 3677-3684, 1995.	
	388	Hormuzdi et al. "A Gene-Targeting Approach Identifies A Function for the First Intron in Expression of the α1 (I) Collagen Gene.", Mol Cell Biol., 18(6): 3368-3375, 1998. Abstract.	
	389	Chow et al. "Development of An Epithelium-Specific Expression Cassette With Human DNA Regulatory Elements for Transgene Expression in Lung Airways", Proc. Natl. Acad. Sci. USA, 94: 14695-14700, 1997.	
	390	Ye et al. "Targeted Gene Correction: A New Strategy for Molecular Medicine", Molecular Medicine Today, P.431-437, 1998.	
	391	Lai et al. "Homologous Recombination Based Gene Therapy", Exp. Nephrol, 7(1):11-14, 1999. Abstract.	
	392	Le Fur et al. "Selective Increase in Specific Alternative Splice Variants of Tyrosinase in Murine Melanomas: A Projected Basis for Immunotherapy", Proc. Natl. Acad. Sci. USA, 94: 5332-5337, 1997.	
	393	Shastry "Gene Disruption in Mice: Models of Development and Disease", Molecular and Cellular Biochemistry, 181: 163-179, 1998.	
	394	Carpentier et al. "DNA Vaccination With HuD Inhibits Growth of A Neuroblastoma in Mice", Clinical Cancer Research, 4: 2819-2824. 1998.	
	395	Lai et al. "DNA Vaccines", Critical Reviews in Immunology, 18: 449-484, 1998.	
Signature			Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 25 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	396	Shekhar et al. "Correlation of Differences in Modulation of Ras Expression With Metastatic Competence of Mouse Mammary Tumour Subpopulations", Invasion Metastasis, 14: 27-37, 1994/5.	
	397	Durand et al. "Active-Site Motifs of Lysosomal Acid Hydrolases: Invariant Features of Clan GH-A Glycosyl Hydrolases Deduced From Hydrophobic Cluster Analysis", Glycobiology, 7(2): 277-284, 1997.	
	398	Korb et al. "Stimulation of Gene Expression by Introns: Conversion of An Inhibitory Intron to A Stimulatory Intron by Alteration of the Splice Donor Sequence", Nucleic Acids Research, 21(25): 5901-5908, 1993.	
	399	Fairbanks et al. "Processing of the Human Heparanase Precursor and Evidence that the Active Enzyme Is A Heterodimer", The Journal of Biological Chemistry, 274(42): 29587-29590, 1999.	
	400	Linhardt et al. "Polysaccharide Lyases", Applied Biochemistry and Biotechnology, 12: 135-176, 1986.	
	401	Dempsey et al. "Heparanase, A Potential Regulator of CellMatrix Interactions", TIBS, 25(8): 349-351, 2000. P.350, Col.1, § 1, Col.3, § 1, Claims 1-24.	
	402	Niwa et al. "Efficient Selection for High-Expression Transfectants With A Novel Eukaryotic Vector", Gene, 108(2): 193-199, 1991. Abstract.	
	403	Mirault et al. "Transgenic Glutathione Peroxidase Mouse Models for Neuroprotection Studies", Ann. NY Acad. Sci., 738: 104-115, 1994. Abstract.	
	404	Lampard et al. "Secretion of Foreign Proteins Mediated by Chicken Lysozyme Gene Regulatory Sequences", Biochem. Cell Biol., 80(6): 777-788, 2002. Abstract.	
	405	Morrison et al. "Sequences in Antibody Molecules Important for Receptor-Mediated Transport Into the Chicken Egg Yolk", Mol. Immunol., 38(8): 619-625, 2002.	
	406	Richards et al. "Construction and Preliminary Characterization of the Rat Casein and Alpha-Lactalbumin cDNA Clones", J. Biol. Chem., 256(1): 526-32, 1981.	
	407	Campbell et al. "Comparison of the Whey Acidic Protein Genes of the Rat and Mouse", Nucleic Acids Res., 12(22): 8685-8697, 1984.	
	408	Gorodetsky et al. "Isolation and Characterization of the Bos Taurus β-Casein Gene", Gene, 66: 87-96, 1988. Abstract.	
	409	Benezra et al. "Thrombin Enhances the Degradation of Heparan Sulfate in the Extracellular Matrix by Tumor Cell Heparanase", Exptl. Cell. Res., 201: 208-215, 1992.	
	410	Harlow et al. "Antibodies - A Laboratory Manual", Cold Spring Harbor Press, P. 471-510, 1988.	
	411	Murray et al. "The Extracellular Matrix", Harper's Biochemistry, McGraw-Hill Professional, 24th Ed., Chap.57, P.667-685, 1998.	
	412	Selvan et al. "Heparan Sulfate in Immune Responses", Ann. NY Acad. Sci., 797: 127-139, 1996.	
	413	Prockop "Marrow Stromal Cells as Stem Cells for Nonhematopoietic Tissues", Science, 276: 71-74, 1997.	

Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 26 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	414	Pomahac et al. "Tissue Engineering of Skin", Crit. Rev. Oral Biol. Med., 9(3): 333-344, 1998. Abstract.	
	415	Benathan et al. "Living Epidermal and Dermal Substitutes for Treatment of Severely Burned Patients", Rev. Med. Suisse Romande, 118(2): 149-153, 1998. Abstract-	
	416	Wang et al. "Basic Fibroblast Growth Factor Enhances Bone-Graft Incorporation: Dose and Time Dependence in Rats", J. Orthop. Res.,14(2): 316-323, 1996. Abstract.	
	417	Garner "Epidermal Regulation of Dermal Fibroblast Activity", Plast. Reconstr. Surg., 102(1):135-139, 1998. Abstract.	
	418	Raghunath et al. "Cultured Epithelial Autografts: Diving From Surgery Into Matrix Biology", Pediatr. Surg. Int., 12(7): 478-483, 1997. Abstract.	
	419	Maillard et al. "Pre-Treatment With Elastase Improves the Efficiency of Percutaneous Adenovirus-Mediated Gene Transfer to the Arterial Media", Gene Therapy, 5: 1023-1030, 1998.	
	420	Wang "Basic Fibroblast Growth Factor for Stimulation of Bone Formation in Osteoinductive or Conductive Implants", Acta Orthop. Scand. Suppl., 269: 1-33, 1996. Abstract.	
	421	Wang "Basic Fibroblast Growth Factor Infused at Different Times During Bone Graft Incorporation. Titanium Chamber Study in Rats", Acta Orthop. Scand., 67(3): 229-236, 1996. Abstract.	
	422	Aspenberg et al. "Fibroblast Growth Factor Stimulates Bone Formation. Bone Induction Studied in Rats", Acta Orthop. Scand., 60(4): 473-476, 1989. Abstract.	
	423	Aspenberg et al. "Dose-Dependent Stimulation of Bone Induction by Basic Fibroblast Growth Factor in Rats", Acta Orthop. Scand., 62(5): 481-484, 1991. Abstract.	
	424	Matoba et al. "Evaluation of Omental Implantation for Perforated Gastric Ulcer Therapy: Findings in A Rat Model", J. Gastroenterol., 31(6): 777-784, 1996. Abstract.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/559,925
Filing Date	May 02, 2006
First Named Inventor	Oron YACOBY-ZEEVI et al
Group Art Unit	1644
Examiner Name	DIBRINO, MARIANNE NMN
Attorney Docket Number	30337

Sheet 27 Of 27

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
	425	Aplin "Adhesion Molecules in Implantation", Reviews of Reproduction, 2(2): 84-93, 1997.	
	426	Lessey et al. "Paracrine Signaling in the Endometrium: Integrins and the Establishement of Uterine Receptivity", J. Reprod. Immunol., 39(1-2): 105-116, 1998. Abstract.	
	427	Burrows et al. "Trophoblast Migration During Human Placental Implantation", Hum. Reprod. Update, 2(4): 307-321, 1996.	
	428	Bischof et al. "The Regulation of Endometrial and Trophoblastic Metalloproteinases During Blastocyst Implantation", Contracept Fertil Sex, 22(1): 48-51, 1994. Abstract.	
	429	Smith et al. "Expression of Heparan Sulfate Protoglycan (Perlecan) in the Mouse Blastocyst Is Regulated During Normal and Delayed Implantation", Dev. Biol., 184(1): 38-47, 1997. Abstract.	
	430	Abaza et al. "Effects of Amino Acid Substitutions Outside An Antigenic Site on Protein Binding to Monoclonal Antibodies of Predetermined Specificity Obtained by Peptide Immunization: Demonstration With Region 94-100 (Antigenic Site 3) of Myoglobin", Journal of Protein Chemistry, 11(5): 433-444, 1992.	
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.
[1]. Applicant's unique citation designation number (optional). [2]. Applicant is to place a check mark here if English language Translation is attached.
This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.
SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/08A (10-96)

Please type a plus sign (+) inside this box → +

Approved for use through 10/31/99 OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/456,573
Filing Date	06/09/2003
First Named Inventor	Iris PECKER
Group Art Unit	1646
Examiner Name	
Attorney Docket Number	25677

Sheet 1 Of 2

U.S. PATENT DOCUMENTS

Examiners Initials	Cite No.[1]	U.S. Patent Document Number	Kind Code[2] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, columns, lines, Where Relevant Passages or Relevant Figures Appear
	✓	6,177,545		Pecker et al	01-23-2001	
	✓	5,968,822		Pecker et al	10-19-1999	
	✓	6,664,105		Pecker et al	12-16-2003	
	✓	6,242,238		Freeman et al	06-05-2001	

FOREIGN PATENT DOCUMENTS

Examiners Initials	Cite No.[1]	Foreign Patent Documents Office[3]	Number[4]	Kind Code[5] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, columns, lines, Where Relevant Passages or Relevant Figures Appear	T[6]
	✓	WO	03/006645		IMCLONE SYSTEMS INC.	01-23-2003		

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] Unique citation designation number. [2] See attached Kinds of U.S. Patent Document. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231.

DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PTO/SB/08A (10-96)

Please type a plus sign (+) inside this box → ☒

Approved for use through 10/31/99 OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known	
Application Number	10/456,573
Filing Date	06/09/2003
First Named Inventor	Iris PECKER
Group Art Unit	1646
Examiner Name	
Attorney Docket Number	25677

Sheet 2 Of 2

Examiner Initials	Cite No.[1]	OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	✓	Vlodavsky et al, "Inhibition of tumor metastasis by heparanase inhibiting species of heparin", *Invasion Metastasis*. 1994-95;14(1-6):290-302 (abstract)	
	✓	Parish et al, "Evidence that sulphated polysaccharides inhibit tumour metastasis by blocking tumour-cell-derived heparanases", *Int J Cancer*. 1987 Oct 15;40(4):511-8.	
	✓	Lider et al, "Suppression of experimental autoimmune diseases and prolongation of allograft survival by treatment of animals with low doses of heparins", *J Clin Invest*. 1989 Mar;83(3):752-6.	
	✓	Gewirtz et al, "Nucleic acid therapeutics: state of the art and future prospects", *Blood*. 1998 Aug 1;92(3):712-36.	
	✓	Hida et al, "Antisense E1AF transfection restrains oral cancer invasion by reducing matrix metalloproteinase activities", *Am J Pathol*. 1997 Jun;150(6):2125-32 (abstract)	
	✓	Thuong et al, "Sequence-specific recognition and modification of double-helical DNA by oligonucleotides", *Angew. Chem Int. Ed. Engl.*, 32:666-690, 1993	
		Cohen, JS, "Oligonucleotide therapeutics", *Trends Biotechnol.*, 10(3):87-91, 19992 (abstract)	
	✓	Szczylik et al, "Selective inhibition of leukemia cell proliferation by BCR-ABL antisense oligodeoxynucleotides", *Science*. 1991 Aug 2;253(5019):562-5. (abstract)	
	✓	Calabretta et al, "Normal and leukemic hematopoietic cells manifest differential sensitivity to inhibitory effects of c-myb antisense oligodeoxynucleotides: an in vitro study relevant to bone marrow purging", *Proc Natl Acad Sci U S A*. 1991 Mar 15;38(6):2351-5.	
	✓	Burch et al, "Oligonucleotides antisense to the interleukin 1 receptor mRN block the effects of interleukin 1 in cultured murine and hum fibroblats and in mice", *J Clin Invest*.. 88(4):1190-1196. 1991 (abstract	
	✓	Agrawal S., "Antisense oligonucleotides as antiviral agents", *Trends Biotechnol*. 10(5):152-158, 19992, (abstract)	
	✓	Uno et al, "Antisense-mediated suppression of human heparanase gene expression inhibits pleural dissemination of human cancer cells", *Cancer Res*. 2001 Nov 1;61(21):7855-60.	

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

[1]. Unique citation designation number. [2]. Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231.

DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☒

Approved for use through 10/31/99 OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

PTO/SB/08A (10-96)

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(*use as many sheets as necessary*)

Complete if Known	
Application Number	10/645,659
Filing Date	08/22/2003
First Named Inventor	YACOBY-ZEEVI
Group Art Unit	1635
Examiner Name	
Attorney Docket Number	26128

Sheet 1 Of 1

Examiner Initials	Cite No.[1]	OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
		Fairbanks et al. "Processing of the Human Heparanase Precursor and Evidence that the Active Enzyme is a Heterodimer", *J. Biol. Chem.*, vol. 274, No. 42, pp. 29587-29590, 15 Oct. 1999.	
		Hulett et al. "Cloning of Mammalian Heparanase, an Important Enzyme in Tumor Invasion and Metastasis", *Nature Medicine*, 5(7):803-809, 1999	
		Toyoshima et al. "Human Heparanase: Purification, Characterization, Cloning, and Expression", *J. of Biolog. Chemistry*, vol. 274, No. 34, pp. 24153-24160, 20 Aug. 1999.	
		Miao et al. "Cloning, Expression, and Purification of Mouse Heparanase", *Protein Expression and Purification*, 26:425-431, 2002	
		Freeman et al. "Human Platelet Heparanase: Purification, Characterization and Catalytic Activity", *Biochem J.*, 330(3): 1341-1350, 1998.	

Examiner Signature		Date Considered	

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1]. Unique citation designation number. [2]. Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231.

DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.